pondingly extended." (8) Lastly, since "for more civilised countries the necessity for further restriction of the birth rate must sooner or later become imperative, if this should occur mainly in people of better endowments who already have a low birth-rate, the deterioration of our racial inheritance will go on at an accelerated pace." Professor Holmes, while recognising of course the "most fortunate circumstance that the third estate continues to include many people of excellent hereditary qualities," is careful to point out that "in course of time they tend to rise and become sterile" and that "thus the great breeding ground from which they emerged is impoverished." Hence "it is the very inadequacy and incompleteness of this sifting process which has thus far tended to keep racial deterioration in check" (has it?) "A social system in which human beings are rewarded by education and position according to their inborn capacity," thus becomes a grave racial danger. It might prove "more destructive than our present system," unless 'race-suicide' is somehow encouraged "among those to whom Nature has been grudging in her distribution of desirable endowments."

Actually the situation is even worse than Professor Holmes declares. Not only are civilised societies extensively failing to recognise natural ability and so losing its services, and rewarding what ability they discover with extinction, but they are also busily engaged in artificially and forcibly preserving the defective stocks they contain, by coddling them in every possible way and keeping from them the knowledge and the temptations which, but for social interference, would so work upon their congenital tendencies as to lead to their extinction. We are thus faced with a failure of man's social instinct, converting it into a danger to the Society it was evolved to protect: the only biological analogue would seem to be the extraordinary practice of some ants of breeding in their nests certain beetles and caterpillars which prey upon their larvae.

Nevertheless Professor Holmes does not quite despair. He points out that "the race has its fate in its own hands to make or to mar" and that it can "take itself in hand and shape its own destiny." It has the means to do this by education, which, though its influence is now largely dysgenic, remains "the essential basis for the realisation of any project of racial improvement." It must inculcate "a sense of responsibility for the hereditary qualities of future generations" and develop "a eugenic conscience which is now sadly lacking in most people of culture." What can the Eugenics Education Society say but "Amen" to this programme?

F. C. S. SCHILLER.

Lundborg and Rundstrom. The Swedish Nation. Tullberg, Stockholm, 1921. 128 pp. 12in. \times 9in., 20 plates and numerous other illustrations and maps.

ONE of the practical difficulties of the eugenic idea is to fix upon a proper basis for the study. Some thinkers approaching the question from a political or at most a social standpoint are impressed mainly with the differential rates of reproduction in the different strata of our industrial society, the large families of the casual labourers and the

dying out, and continual replenishment, of the plutocracy at the head. Such persons see in eugenics a possible means of limiting the multiplication of supposedly inferior "types" and make the eugenics propaganda assimilate itself to the age-long class war of the rich against the poor. Others see a more excellent way in the collection of statistics and the elaboration of refined methods of mathematical analysis and while the scientific effort involved is of the highest order and the general aim is far above the level of that of the first group, yet the results remain in perpetual doubt because of the difficulty of dealing satisfactorily with statistics of human beings. In every society of every land there are men of diverse breed and heritage, and statistics have to be used with great reserve and caution if the danger of homologising unlikes is to be avoided. The group of Swedish thinkers who have contributed to this sumptuous and well illustrated book have realised the dangers of both the above methods and in the country of Linnaeus, Retzius and Montelius, the last of whom survives to contribute to the book, have naturally been drawn to base their study on an appreciation of human As with the improvement of animal breeds it has become ever breeds. more important to understand the characteristics of those breeds, including many hidden ones, so the Swedish eugenists have come to see that they are bound to study race-biology.

The great strides which race-study made in Sweden under Retzius, father and son, and under Fürst, probably account for a certain halt which can be only temporary, for the new Institute of Race-Biology is evidently destined to take it up. The halt is exemplified by the fact that little attempt is made to refine analyses beyond the artificially clear grouping into Nordic, Lapp, Finn, Walloon and mixtures of these same. Now the probabilities are that among the earliest inhabitants of Sweden were individuals with extremely long heads of notable height with the sagittal ridge strongly marked as it is in the Aurignacean-Solutrean skulls from Brunn and Brux in Bohemia, as it seems to be in the Combe Capelle skull from France and as it is in some of the river drift and river bed skulls, as well as later ones, in Britain. This old type, very distinct from the short faced Cro-Magnon type not only in the height of the skull but also in the frequently enormous development of the brow ridges is found in graves of the later Stone Age or early Bronze Age in both Scandinavia and Great Britain, and it survives in both areas as well as in most regions of the world outside Central Asia to-day. That the Nordic Race Type is a development from it is becoming increasingly probable and the Nord seems to have developed somewhere between Scandinavia and the Caspian. His remarkable complexion, transparent skin (at least in sheltered individuals), fair hair and blue eyes are all characters which have developed as modifications of an original dark type, for the old type when found almost always has a dark colouring associated with it. A future work on the Swedish people, when the Race-Biology Institute has had time to work, will probably show us a number of pictures of individuals grading from the old types to the fully developed Nord who figures so remarkably in this book. It will also refine its analysis of broad heads and see whether the broad heads now found in numbers in various southern districts are related to the broad heads which are so important in the Bronze Age Graves of South Sweden, Denmark and other parts of Europe, including Britain. But, however this may be, the Swedish thinkers are clear that the prime classification must be according to physical type rather than according to the social class to which the individual belongs and this is a prime scientific gain though it may very

likely delay the drawing of practical social conclusions.

A most valuable study of types of emigration is given in this book, breaking ground in a subject which badly needs study in Britain where the drift away from the poorer hill country is such a marked feature of modern life, and, though so understandable, is yet so much to be regretted by all who try to think of and for the future of the British peoples. We need to take up Sir Leslie Mackenzie's valuable suggestions for special health and educational services for the benefit of the sparsely peopled highlands and it is evident that Lundborg in Sweden is giving attention to this grave problem. Emigration studied historically by von Friesen is shown to have had in most cases the goad of foodshortage behind it as well as the lure of rich opportunity in front. The author rightly refers to the work of de Geer and others concerning climates of the past and shows how worsening of climate, causing uncertainty of harvests at various periods, drove people out. If the writer of this chapter of the book had but seen that the studies of O. Pettersson are a valuable supplement to those of de Geer and his school he would have been able to give valuable climatic correlations for some of the more recent phases of emigration. Nevertheless there is the clear realisation of the link between these social studies and the facts of anthropology and archæology and so the clear promise of progress in this direction also.

One must give a special mention to Lundborg's study of the famous family which has myoklonus epilepsy as a hereditary disease if only to remark how difficult it is to submerge a hereditary taint. It is a matter for congratulation that the new institute is to be under Professor Lundborg's direction and that his zeal for pedigree study is infecting his fellow workers. The demographic essays in the book show that parish registers and other records of family history are being

followed with care and profit.

The most disappointing chapter is that by Bergfors on national character. Here was an opportunity for social monographic study, for producing an interesting variant on the sociological descriptions in the great Report on the Condition of Mothers and Children in Scotland. But instead of this we are treated to quotations and short statements of opinion which, to use a colloquialism, cut next to no ice. When the social monograph and the racial analysis work ultimately get married, the offspring will be new ideas as to the diverse functions in our complex society which diverse physical and psychical types are able to play. Let us hope that this will deliver us from current cant about superior and inferior types, a line of classification which should be abolished forthwith. Our so-called superior types are frequently cases of superiority in the scramble for money rather than of sound health of body and mind likely to maintain itself unsensationally through the generations. And our so-called inferior types are often types which chance has placed in unsuitable surroundings, much as though a gardener called a rose inferior because it would not grow well in light

sandy soil.

We need but add that the policy of developing a race-biological institute with a strong basis of microscopic cytology and of physical racial survey suggests real scientific earnestness and, as careful demography is being added thereto, the promise for the institute's future is bright indeed. May it avoid the many pitfalls in its way, and show us all how to study carefully and patiently for the maintenance and betterment of humanity in the fullest sense, on a level, above all prejudice of race or state or class.

H.J.F.